

CLAIMS

1. A warm molding raw material powder in powder metallurgy, comprising a composition of hydroxy fatty acid salt having an average particle diameter of from 5  $\mu\text{m}$  to 5 100  $\mu\text{m}$  is in a range of from 0.3 wt% to 2 wt%.

2. A warm molding raw material powder in powder metallurgy, comprising a composition of a hydroxy fatty acid salt having an average particle diameter of from 5  $\mu\text{m}$  10 to 100  $\mu\text{m}$  is in a range of from 0.5 wt% to 2 wt%.

3. The warm molding raw material powder according to Claim 1, wherein a lubricant having a melting point below a warm molding temperature is not contained.

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4. The warm molding raw material powder according to Claim 1, wherein the hydroxy fatty acid salt is a hydroxy stearic acid salt.

20 5. The warm molding raw material powder according to Claim 4, wherein the hydroxy stearic acid salt is hydroxy lithium stearate.

25 6. The warm molding raw material powder according to Claim 5, wherein the hydroxy lithium stearate is 12-hydroxy lithium stearate.

7. A warm molding method performed comprising the step of using the warm molding raw material powder according to Claim 1.

5 8. The warm molding method according to Claim 7, wherein, in powder metallurgy, after a hydroxy fatty acid salt having an average particle diameter of 50  $\mu\text{m}$  or less is attached on a mold, further comprising the step of performing warm molding in the mold.

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9. The warm molding method according to Claim 8, wherein the hydroxy fatty acid salt is a hydroxy fatty acid lithium.

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10. The warm molding method according to Claim 9, wherein the hydroxy fatty acid lithium is hydroxy lithium stearate.

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11. The warm molding raw material powder according to Claim 10, wherein the hydroxy lithium stearate is 12-hydroxy lithium stearate.